



## Powhatan County

### Water Source Overview

Major sources include groundwater wells, purchased water, and golf course irrigation lakes.

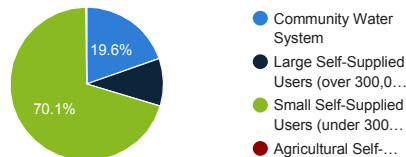
**\*Table 1:** Reported (2010) and projected (2040) water use by system type for Powhatan County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	0.727	1.393
Large Self-Supplied Users (over 300,000 gal/month)	0.370	0.370
Small Self-Supplied Users (under 300,000 gal/month)	2.596	2.719
Agricultural Self-Supplied Users	0.008	0.008

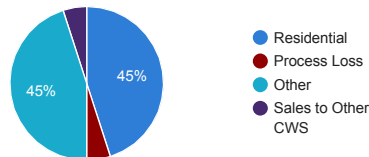
### Water Use by System Type

Approximately 25,389 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

**\*Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



**\*Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)



**\*Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Powhatan County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
2.71	0.99	2.94	1.55

**\*Figure 3:** Powhatan County highlighted in the Commonwealth of Virginia



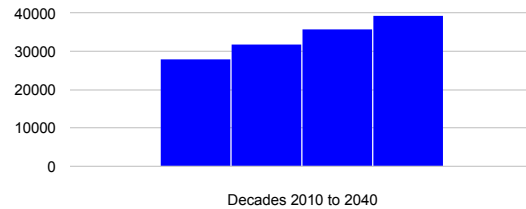
### Projected Water Demand

Population and demand are projected to increase through the planning period. A deficit of 0.56 MGD is anticipated by the year 2030. Possible alternatives for meeting this additional demand include the regional Cobbs Creek Reservoir project and regional coordination between DOC, Goochland and Powhatan Counties to increase the withdrawal of water from an existing James River water withdrawal.

**\*Table 3:** Powhatan County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

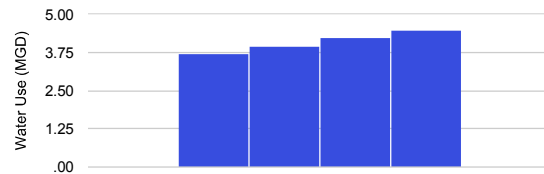
2010	2020	2030	2040	% Change (2010-2040)
28,046	32,019	35,702	39,343	39.3%

**\*Figure 4:** Powhatan County population projections by decade for 2010, 2020, 2030 & 2040



**\*Table 4 & Figure 5:** Powhatan County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
3.70	3.96	4.23	4.49	21.3%



### Drought Management Practices

The County adopted an ordinance for the implementation and enforcement of the Drought Response and Contingency Plan. (Henrico-Goochland-Powhatan-Cumberland Counties Regional WSP)